



PATENT

Attorney Docket No.: A-58631-5/RFT/DJM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

CHRISTIAN et al.

Serial No. 09/991,262

Filed: November 20, 2001

For: INSECT VIRUSES AND THEIR
USES IN PROTECTING PLANTS

Examiner: Not Yet Assigned

Group Art Unit: 1638

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Box Missing Parts, Washington, DC 20231 on:

Dated: March 22, 2002

Signed: Lisa Jeanetta
Lisa Jeanetta

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner
for Patents
Washington, DC 20231

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicant wishes to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO-1449.

Since copies of all the references were provided either by the Applicant or the Examiner in the following related U.S. Application, Serial No. 09/234,238, filed January 20, 1999, upon which the instant application relies for its priority date, in accordance with 37 C.F.R. § 1.98(d), no copies of these references are enclosed.

None of the foregoing references are believed to disclose the invention as claimed. Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the

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reference constitutes prior art against the invention claimed in the above-identified application.

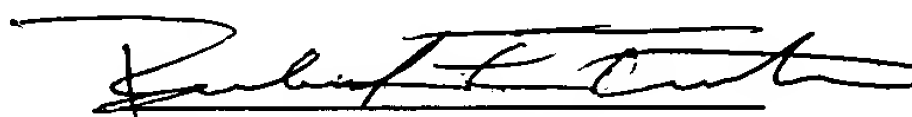
Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

This Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of a national stage, or before the mailing date of a first Office Action on the merits, 37 C.F.R. § 1.97(b), and therefore no fee is required. The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Our Order No. A-58631-5/RFT/DJM).

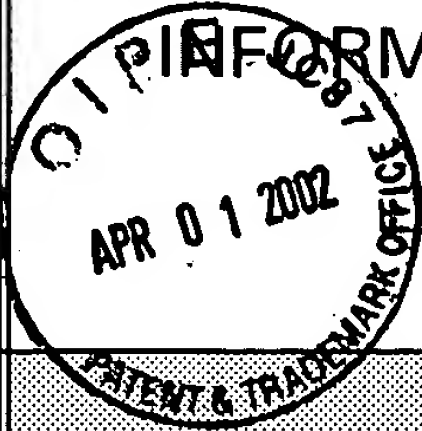
Respectfully submitted,

FLEHR, HOHBACH, TEST,
ALBRITTON & HERBERT

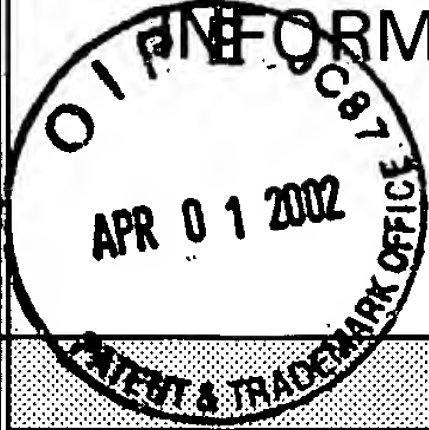
Dated: 3/18/02


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 <p>PTO-1449</p>				ATTY. DOCKET NO. A-58631-5/RFT/DJM		SERIAL NO. 09/991,262	
				APPLICANT: CHRISTIAN et al.			
				FILING DATE November 30, 2001		GROUP 1638	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS		PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	1	5,508,186	4/1996	Young et al.	435	235.1	
	2	5,135,917	8/1992	Burch	514	44	
	3	5,254,678	10/1993	Haseloff et al.	536	23.2	
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS		PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation Yes No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	4	Agrawal et al., "Assembly of the T = 4 Nudaurelia capensis ω Virus Capsid Protein, Post-Translational Cleavage, and Specific Encapsidation of Its mRNA in a Baculovirus Expression System," Virology, 207(1):89-97 (1995)					
	5	Hanzlik, et al., "A novel small RNA virus isolated from the cotton bollworm, Helicoverpa armigera," Journal of General Virology, 74:1805-1810 (1993).					
	6	Agrawal et al., "Sequence and Analysis of the Capsid Protein of Nudaurelia Capensis ω Virus, an Insect Virus with T = 4 Icosahedral Symmetry," Virology, 190:806-814 (1992).					
	7	Rubinstein et al., "Short Communications: The Nucleic Acids of Viruses Infecting Heliothis armigera," Virology, 69:323-326 (1976).					
	8	Dasmahapatra et al., "Infectious RNA derived by transcription from cloned cDNA copies of the genomic RNA of an insect virus," Proc. Natl. Acad. Sci. USA, 83:63-66 (1986).					
	9	Hahn et al., "Infectious Sindbis virus transient expression vectors for studying antigen processing and presentation," Proc. Natl. Acad. Sci. USA, 89:2679-2683 (1992).					
	10	McCutchen et al., "Development of a Recombinant Baculovirus Expressing an Insect-Selective Neurotoxin: Potential for Pest Control," Bio/Technology, 9:848-852 (1991).					
	11	Scotti et al., "The Biology and Ecology of Strains of an Insect Small RNA Virus Complex," Advances in Virus Research, 26:117-143 (1981).					
	12	Meinke et al., "Unusual Sequence Organization in CenB, an Inverting Endoglucanase from Cellulomonas fimi," J. Bacterio., 173(1):308-314 (1991).					
EXAMINER				DATE CONSIDERED			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER'S INITIALS		PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation Yes No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	13	Cavarelli, et al., "Crystallization and Preliminary Structure Analysis of an Insect Virus with T=4 Quasi-Symmetry: Nudaurelia capensis ω Virus," Acta. Cryst, B47, 23-29 (1991).					
	14	Christian et al., "Insect Viruses: New Strategies for Pest Control," Chapter 4 of Molecular Approaches to Fundamental and Applied Entomology, (J. Oakeshott, M. Whitten, Ed.) New York: Springer-Verlag: 128-123 (1995).					
	15	Green et al., "Systematic Generation of Sequence-Tagged Sites for Physical Mapping of Human Chromosomes: Application to the Mapping of Human Chromosome 7 Using Yeast Artificial Chromosomes," Genomics, 11:548-564 (1991).					
	16	Gillies et al., "Antigen binding and biological activities of engineered mutant chimeric antibodies with human tumor specificities," Human Antibodies and Hybridomas., 1(1):47-54 (1990).					
	17	Capon et al., "Two distinct families of human and bovine interferon- α genes are coordinately expressed and encode functional Polypeptides," Molecular and Cellular Biology, 5(4):768-779 (1985).					
	18	O'Conner et al., "An extra copy of nimEcyclinB elevates pre-MPF levels and partially suppresses mutation of numTcdc25 in Aspergillus nidulans," The EMBO Journal, 11(6):2139-2149 (1992).					
	19	Burgess et al., "Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue," J. Cell Biol., 11:2129-2138 (1990).					
	20	Lazar et al., "Transforming Growth Factor α : Mutation of Aspartic Acid 47 and Leucine 48 results in Different Biological Activities," Molecular and Cellular Biology, 8(#):1247-1252 (1988).					
EXAMINER				DATE CONSIDERED			

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8085 1449A.FRM (8/95) [558795]

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	21	Tao et al., "Studies of Aglycosylated Chimeric Mouse-Human IgG. Role of Carbohydrate in the Structure and Effector Functions Mediated by the Human IgG Constant Region," The Journal of Immunology, 143(8):2595-2601 (1989).					
	22	Vaeck et al., "Transgenic plants protected from insect attack," Nature, 328:33-37 (1987).					
	23	Fischhoff et al., "Insect Tolerant Transgenic Tomato plants," Bio/Technology, 5:807-813 (1987).					
	24	Tiong et al., "Microbial Control of an Outbreak of Darna trima (Moore) and oil palm (Elaeis guineensis Jacq.) in Sarawak (Malaysian Borneo)." Proc. Malays. Int. Agric. Oil. Conf., 624-639 (1976).					
	25	Garzon et al., "Nodaviridae," Atlas of Invertebrates Virus, (Eds. J.R. Adam and J.R. Bonami), CRC Press, 351-593 (1991).					
	26	Hendry et al., "Nodaviridae of Invertebrates," Viruses of Invertebrates, (Ed. E. Kurtak) 227-275.					
	27	Desmier et al., "Use of Microbial Pesticides for field crops, the case of viruses to control oil palm and coconut leaf-eating caterpillars," Proceedings to the Biotechnology for Tropical Plant Protection Conference, Abstract, Kuala Lumpur, August 1992, Malaysian Plant Protection Society.					
	28	Bawden et al., "The Specificity of Helicoverpa armigera Stunt Virus Infectivity," Journal of Invertebrate Pathology, 74:156-163 (1999).					
	29	Rubinstein et al., "A nonoccluded Virus of the American Bollworm, Heliothis Armigera (HUBN)," Phytophylactica, 11:179-180 (1979).					
	30	Tam et al., "Hepatitis E Virus (HEV): Molecular cloning and Sequencing og the Full Length Viral Genome," Virology, 185:120-131 (1991).					
	31	Moore, N.F., "The Nudaurelia Beta Family of Insect Viruses," Viruses of Invertebrates. Marcel Dekker: New York. Ed: E. Kurstak, 277-299 (1991).					
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